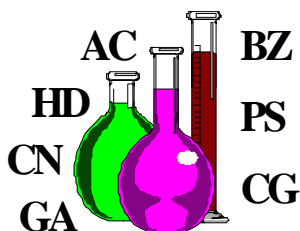


U.S. Army Center for Health Promotion and Preventive Medicine



General Facts About Tear Agent Chloropicrin (PS)

218-46-1096

General

PS was used in large quantities during World War I; it was stockpiled during World War II and is no longer authorized for military use. PS is more toxic than chlorine but less toxic than phosgene (CG). PS is a severe respiratory irritant. Persons with impaired pulmonary function may be at increased risk from exposure. It is a possible but unconfirmed tumorigenic agent that decomposes to form toxic chlorine gas and nitrogen oxides near oxygen fires.

Synonyms

Nitrotrichloromethane;
Trichloronitromethane;
Nitrochloroform.

Description

PS is a colorless, oily liquid with a stinging pungent odor.

Overexposure Effects

Chloropicrin is a powerful irritant whose vapors cause lung, skin, eye, nose and throat irritation, coughing and vomiting. As an eye irritant, it produces immediate burning, pain and tearing. In high concentration, PS damages the lungs, causing pulmonary edema. Exposure to liquid PS can cause severe burns on the skin that generally result in blisters and lesions. The lowest irritant concentration is 9 mg-min/m³ for 10 minutes, and the median lethal concentration is 2,000 mg-min/m³.

Emergency and First Aid Procedures

Inhalation: remove the victim to fresh air immediately; perform artificial respiration if breathing has stopped; keep the victim warm and at rest; seek medical attention immediately.

Eye Contact: wash eyes immediately with copious amounts of water, lifting the lower and upper lids occasionally; do not wear contact lenses when working with this chemical; seek medical attention immediately.

Skin Contact: wash the contaminated skin using soap or mild detergent and water; remove the contaminated clothing immediately; wash the skin using soap or mild detergent and water; if irritation persists after washing, seek medical attention immediately.

Ingestion: give victim copious amounts of water immediately; induce vomiting by having victim touch the back of his throat with his finger; do not make an unconscious person vomit; seek medical attention immediately.

For more information, contact:
Kenneth E. Williams
USACHPPM
Aberdeen Proving Ground, MD 21010-5422
Commercial (410) 671-2208, DSN: 584-2208
email: kwilliam@aeha1.apgea.army.mil